SUMMARY

S.1 Introduction

This Draft Supplemental Environmental Document (DSED) to the Final Environmental Document (FED), Pacific Herring Commercial Fishing Regulations, 1998, provides the review and analysis required by California Environmental Quality Act (CEQA) Guidelines to assist the California Fish and Game Commission (Commission) in regulating the commercial harvest of Pacific herring throughout the State's ocean and estuarine waters. Specifically, the DSED reviews and evaluates proposed regulatory changes for the 2004-05 fishing season, supplementing, and in some cases replacing, aspects of the proposed project described in the 1998 FED and the Final Supplemental Environmental documents of 1999, 2000, 2001, and 2002. A Notice of Preparation (NOP) and public scoping meetings were used to identify and incorporate concerns and recommendations of the public, resource and regulatory agencies, and the fishing industry into the review and analysis of the proposed changes contained in these documents.

The DSED includes six chapters. Chapter 1 discusses the authorities and responsibilities under which the DSED was developed and describes its intended use. Chapter 2 describes the proposed project and alternatives for regulating the commercial harvest of herring. Chapter 3 describes the existing environment where the California herring fisheries occur. Chapter 4 addresses the impacts of the proposed project and cumulative effects. Chapter 5 describes the impacts of the alternatives to the proposed project. Chapter 6 identifies consultations with other agencies, professionals, and the public. References used throughout this DSED are listed in the Literature Cited section.

The proposed project has been selected as the preferred alternative based on the analysis of this DSED. The proposed project is identified as the preferred alternative because it provides a set of regulations most likely to achieve the State's CEQA policy with respect to the conservation, sustainability, maintenance, and utilization of the Pacific herring resource.

S.2 Proposed Project

The proposed project is a body of recommended regulations governing the commercial harvest of herring-for-roe products, the harvest of herring eggs-on-kelp, and the harvest of herring as fresh fish, for bait, and pet food. The proposed project takes the form of recommendations for continuation, amendment, or change to an existing body of regulations in effect since November 1, 2003 (sections 163, 163.5, and 164, Title 14, California Code of Regulations [CCR]).

The proposed regulatory changes will establish fishing quotas for San Francisco and Tomales bays for the 2004-05 herring fishing season, based on the most recent assessments of the spawning populations in these locations. Previously established quotas for Humboldt Bay and Crescent City Harbor fisheries are not affected by these regulatory changes. The proposed changes recommended by this document also include provisions for the continued experimental use of a 2-inch mesh size for gill nets used in the roe herring fishery in Tomales Bay, for the 2004-05 season only. Other changes relating to the Department of Fish and Game's (Department) proposed commercial herring season dates for the 2004-05 season, permit suspensions, and minor editorial changes are recommended to improve the clarity of the regulations or provide for the efficient harvest and orderly conduct of the fishery and for the protection of the resource.

The specific regulatory changes recommended for the 2004-05 season will: (1) provide for a 3,440-ton quota for San Francisco Bay (10 percent of the 34,400-ton estimated spawning biomass for the 2003-04 season); (2) provide an initial 400-ton fishing quota in Tomales Bay (2.3 percent of the 2003-04 estimated spawning biomass of 12,124 tons) for Tomales Bay with provisions to increase the quota in season if escapement goals are achieved by February 15, 2005; (3) set the dates of the roe herring fisheries in San Francisco Bay from 5:00 p.m. on December 5, 2004 until noon on December 23, 2004 ("DH" gill net platoon only), and 5:00 p.m. on January 2, 2005 until noon on March 11, 2005; (4) set the dates of the roe herring fishery in Tomales Bay from 5:00 p.m. on Sunday, December 26, 2004 until noon on Friday, December 31, 2004, and from 5:00 p.m. on

Sunday, January 2, 2005 to noon on Friday, February 25, 2005; (5) and provide for the Tomales Bay fishery a one-year continuation of a mesh size of no less than 2 inches or greater than $2\frac{1}{2}$ inches, for the 2004-05 season only.

S.3 Project Alternatives

Three alternatives are considered in this DSED. These alternatives include: (1) a no- fishery alternative; (2) using regulations established by Commission action; and (3) establishing individual vessel quotas for gill net vessels in the roe herring fishery. Refer to Section 2.4, Project Alternatives, and Chapter 6, Analysis of Alternatives, of the FED, for a thorough description of alternatives and analysis of their impacts.

S.4 Existing Environment

The environments most likely to be affected by the regulatory revisions outlined in this DSED are San Francisco Bay and Tomales Bay. Although the proposed project consists primarily of regulatory changes for San Francisco Bay and Tomales Bay fisheries, the existing environment potentially affected by the proposed project and alternatives also includes the open ocean and other bays in which herring occur. Herring fisheries also occur in the Crescent City Harbor area, Humboldt Bay, and the open ocean, primarily within Monterey Bay. Refer to Section 3.3, Specific Biological and Environmental Descriptions of the FED, for a thorough description of these environments and Chapter 3 of this document for a description of the environmental setting for these areas.

S.5 Environmental Impacts

S.5.1 Proposed Project

An analysis of the potential impacts of the proposed project described by this DSED did not identify any new potential impacts that are not analyzed in the FED. Several areas of potential concern were identified in the FED. The FED identified the area with the highest potential for adverse impacts associated with the proposed

regulatory changes as the San Francisco Bay area, which supports the largest roe herring fishery in the State. The following localized, short-term, and less than significant impacts were identified in the FED for several areas of potential concern including: (1) boat and vehicle traffic circulation; (2) water and air quality; (3) housing and utilities; (4) geology, scenic quality, recreation; and (5) noise. The FED found biological impacts to have the greatest potential for significant environmental impact, but found these impacts to be localized, short-term, and less than significant, with mitigation provided by the current management strategy and Department conducted herring population monitoring. Refer to Chapter 4 of the FED for a thorough environmental impact analysis of the proposed project. Any adverse impacts associated with the regulatory changes proposed by this DSED are addressed within this document.

S.5.2 Alternatives

The alternatives proposed in this DSED are the same as those described in the FED. A thorough analysis of the impacts of these alternatives is provided in Chapter 6 of the FED. A summary of impacts associated with these alternatives is provided below.

Alternative 1 (no fishery)

Localized, short-term, and less than significant impacts to vessel and vehicle traffic circulation, water quality, air quality, housing and utilities, scenic quality, recreational opportunities, and noise levels identified for the proposed project would be eliminated or redistributed in an unpredictable manner.

Potential biological impacts associated with a no fishery alternative include an increased rate of natural mortality, the potential for deterioration in the condition of the herring population as it reaches carrying capacity, and potential impacts to other species that compete with herring for food resources. Although this would be a natural process, adverse temporary impacts would nonetheless be associated with this alternative.

Alternative 2 (existing regulations)

In most regards, the environmental impacts associated with this alternative

would be comparable to those of the proposed project. Although this alternative does provide for an adjustment of quotas and season dates, it does not address certain fishery-related problems considered in amendments or changes to existing regulations. The existing regulation alternative would maintain the herring fishery regulations as amended through 2003 and would not provide for the consistent management of the State's resources.

Alternative 3 (individual vessel quota)

As addressed in detail within the FED, individual vessel quotas, rather than the platoon-based quota system currently used in the roe herring gill net fishery, could potentially increase impacts due to an increase in the number of days fished. However, these impacts are still expected to be short-term, localized, and less than significant for most environmental categories.

Wastage of resource could result from sorting catches to remove males from the catch or discarding unripe fish to achieve higher roe content, and therefore, higher ex-vessel prices. However, the competition between permittees for a share of the quota is greatly lessened under an individual quota system and may result in fewer nets likely to be lost, thus reducing impacts from "ghost" net fishing as explained in Section 4.2.6.1 of the FED.

S.5.3 Cumulative

An analysis of the cumulative impacts of the proposed project revealed no additional impacts to those addressed in the FED. The proposed regulatory changes addressed by this DSED are for an existing ongoing project and no regulatory changes proposed herein alter the potential for or the existing cumulative impacts. An analysis of cumulative impacts is provided in Chapter 5 of the FED.

A variety of factors have the capacity to influence Pacific herring population status in California in addition to the proposed project including: (1) biological events; (2) competitive interactions with other pelagic fish and fisheries; (3) oceanographic events; (4) habitat loss; and (5) water quality. However, as with potential impacts from the on-going commercial harvest of herring, continued monitoring of the herring resource and oceanographic conditions should herald any

trends long before the stock's reproductive potential is jeopardized.

S.6 Areas of Controversy

The following areas of controversy have been identified regarding commercial herring fishing in prior years. Item numbers 1 through 6 of these areas of controversy are addressed in detail within Chapter 5 of the FED. Item numbers 7 through 9 were identified during three public scoping meetings held on January 22, 2004 in San Francisco, and April 13, 2004 in Sausalito and Bodega Bay, and during two Director's Herring Advisory Committee Meetings held on March 25, 2004 in San Francisco and April 30, 2004 in Sausalito; further details of items 7 through 9 are presented in this DSED:

- Potential interactions between marine mammals and commercial fishing activities;
- 2. Importance of herring as a forage species for sea birds, marine mammals, and other fishes:
- 3. Inadequate knowledge of the resource;
- 4. Errors in stock assessment;
- 5. Insufficient management resources;
- Potential impact of unforeseen events or catastrophes (e.g., oil spills, chemical spills);
- 7. Status of the herring population in San Francisco Bay;
- 8. Change in survey methodology for population assessment; and
- 9. Mesh size reduction in San Francisco Bay.

S.7 Issues to be Resolved

At issue is whether or not to provide for commercial fishing as an element of herring management in California. If commercial herring fishing is authorized, decisions are needed to specify the areas, seasons, fishing quotas and other appropriate special conditions under which fishing operations may be conducted. As

discussed, one aspect of managing this and other fishery resources is the understanding that a no project alternative is considered a management tool. This document, the 1998 FED, the 1999 FSED, the 2000 FSED, the 2001 FSED, the 2002 FSED include a review and discussion of the proposed project as well as alternatives.